UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I - EPA NEW ENGLAND

DATE: Draft:

Final: 8/29/11 (over 30 days due to several weeks of vacation after inspection)

Revised:

SUBJ: Recon of storm water outfalls around Coes Reservoir, Worcester MA.

FROM: Douglas Koopman, Environmental Engineer

Water Technical unit

THRU: Denny Dart, Water Technical Branch Chief

TO: File

I. Background Information

Date of inspection: 7/15/11

Weather Conditions: No rain for several days, Clear Sky and temp in high 70's

Personnel in

attendance: Doug Koopman EPA

Erin Trainor EPA Lab

II. Purpose of Inspection

Screen storm water outfalls in the area of Coes Reservoir. Inspectors were looking for storm water outfalls that had dry weather flow. Outfalls that had dry weather flow were sampled and tested for ammonia, chlorine and surfactants.

III. Description of Outfalls

Below is a list of storm water outfalls taken from the City of Worcester's Storm water Management Plan Annual Report.

| minor | Outfall # | Address | Acres | size inches | latest screening |
|-------|-----------|----------------------|-------|-------------|------------------|
| | cr01 | 350 June Street | 9.6 | 24 | 9/4/2008 |
| | cr02 | 18 Merriweather Road | 1.6 | 12 | 9/23/2008 |
| | cr03 | 19 Souther Drive | 1.3 | 12 | 9/25/2008 |
| | cr04 | 14 Bergin Lane | 34.5 | 24 | 9/23/2008 |
| | cr05 | 254 Mill Street | 22.5 | 30 | 9/4/2008 |
| | cr06 | 225 Mill Street | 3.0 | +- | 9/4/2008 |
| | cr07 | 225 Mill Street | 3.4 | 24 | 9/4/2008 |
| | сг08 | 173 Mill Street | 2.3 | 30 | 9/4/2008 |
| | cr09 | 173 Mill Street | 1.1 | 15 | 9/4/2008 |
| | cr10 | 80 Circut Avenue | 4.2 | 12 | 9/23/2008 |
| | cr11 | 159 Mill Street | 9.8 | 18 | 9/4/2008 |
| | cr12 | 141 Mill Street | 1.4 | 15 | 9/4/2008 |
| | cr13 | 268 June Street | 26.4 | 24 | 9/4/2008 |
| | cr14 | 21 Hemlock Street | 1.3 | 12 | 9/23/2008 |
| | crt01 | 2 Passway Four | 0.8 | 18 | 10/8/2008 |
| | crt02 | 93 Outlook Drive | 24.5 | 18 | 9/23/2008 |
| | crt03 | 93 Outlook Drive | 1.6 | 24 | 10/8/2008 |
| | crt04 | 93 Outlook Drive | 1.5 | 15 | 9/23/2008 |

V. Inspection

When the inspections began (approx 8:30am) the morning of 7/15/11 the ground was dry the sun was out and the temperature was in the 70's. The last rain was on the evening of 7/13 (passing thunder storms). Note 159 Mill Street had two outfalls at this location; 173 Mill Street only had one outfall. 225 Mill Street only found one outfall, 254 Mill Street had outfalls. It looks like the numbering of the outfalls got mixed up.

159 Mill Street

One outfall was flowing very slowly. The Inspector took picture and sample to run the field kit tests. The following results were obtained: NH³-.25ppm, CL⁻-.08 ppm, Surfactants - <.25ppm.

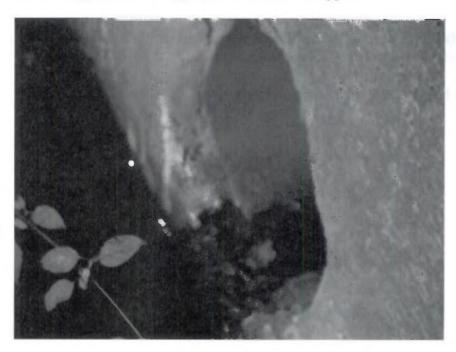


The second outfall located at 159 Mill Street. Water was up into the pipe so no sample was taken.



225 Mill Street

One outfall was located at this location. Outfall had a small amount of flow coming from the pipe. The inspectors could not collect a sample directly from the pipe so a sample of water was taken below the discharge in order to run the field kits. The following results were obtained: NH³-.0 ppm, CL⁻-.14 ppm, Surfactants - <.25ppm.



93 Outlook Drive: The inspectors found 2 outfalls at this location. The list from the storm water report shows 3 outfalls at this location. One of the outfalls identified had water flowing from it and a sample was taken to run the field kit. The following results were obtained: NH³- 0 ppm, CL⁻-.11 ppm, Surfactants - 0 ppm.



268 June Street: The inspectors were unable to get to the outfall pipe at this location as the residents of the property were not home. However, flow was noted in the storm water manhole in front of the property.

80 Circuit Avenue: This outfall pipe was found and the area around it is in need of being cleaned out as it is almost entirely blocked by sand and silt from the reservoir.

The remaining outfalls on the list were either not located or were located but had no dry weather flow during the inspection.



United States Environmental Protection Agency

Washington, D.C. 20460

| Water Compliance Inspection Report | | | | | | |
|--|---|-----------------------------|------------------------|--|--|--|
| | ata System Coding (i.e., PCS) | | | | | |
| Transaction Code NDPES | yy/mm/dd I | nspection Type In | spector Fac Type | | | |
| 1 N 2 3 1 | 1 1 1 0 7 1 5 1 | 7 18 < 19 | R 20 | | | |
| Inspection T | ype Description | | | | | |
| 21 | Remarks | шш | 66 | | | |
| Inspection Work Days Facility Self-Monitoring Evaluation Rating 67 1 . 0 69 70 | 71 B1 QA 72 | 73 74 75 | reserved | | | |
| | B: Facility Data | | | | | |
| Name and Location of Facility Inspected (For Industrial users discharging to POTW, also include 225 Mill Street | POTW name and NPDES permit number) | Entry Time/Date "7/15/11 | Permit Effective Date | | | |
| Worcester MA | | Exit Time/Date | Permit Expiration Date | | | |
| Several outfalls in the Coes Resevior list were found flowing test kits were run on then | n | | | | | |
| | | | | | | |
| Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) | | Other Facility Data | | | | |
| No contact with the City of Worcester was made during these sampling events | No contact with the City of Worcester was made during these sampling events | | | | | |
| Name, Address of responsible Official/Title/Phone and Fax Number. | | | | | | |
| | Contacted Yes X No | | | | | |
| Section C: Areas Evaluated During In | spection (Check only those areas ev | aluated) | | | | |
| Permit Self-Monitoring Program | Pretreatment | MS4 | | | | |
| Records/Reports Compliance Schedules | Pollution Prevention | | | | | |
| Facility Site Review Laboratory X Effluent/Receiving Waters Operations & Maintenance | X Storm Water Combined Sewer Overflow | | | | | |
| Flow Measurement Sludge Handling/Disposal | Sanitary Sewer Overflow | | | | | |
| Section D: Summary of Findings/Comments (Attach | additional sheets of narrative and ch | necklists as necessar | y) | | | |
| SEV Codes SEV Description | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Name(s) and Signature(s) of Inspector(s) | Agency/Office/Phone and Fax Numbers | Da | ate | | | |
| Dougles Korpina- | | **8/ | 29/11 | | | |
| Douglas Koopman / | USEPA, OES - SEW / 671- 918 - 1747 | | | | | |
| Signature of Management QA Reviewer | Agency/Office/Phone and Fax Numbers | Da | ate | | | |

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I - EPA NEW ENGLAND

DATE: Draft:

Final: 7/22/11 Revised:

SUBJ: Recon of storm water outfalls around Coes Resivoir, Worcester MA.

FROM: Douglas Koopman, Environmental Engineer

Water Technical unit

THRU: Denny Dart, Water Technical Branch Chief

TO: File

I. Background Information

Date of inspection: 7/15/11

Weather Conditions: No rain for several days, Clear Sky and temp in high 70's

Personnel in

attendance: Doug Koopman EPA

Erin Trainor EPA Lab

II. Purpose of Inspection

Screen storm water outfalls in the area of Coes Resioir. Inspectors were looking for storm water outfalls that had dry weather flow. Outfalls that had dry weather flow were sampled and tested for ammonia, chlorine and surfactants.

III. <u>Description of Outfalls</u>

Below is a list of storm water outfalls taken from the City of Worcester's Stormwater Management Plan Annual report.

| minor | Outfall # | Address | Acres | size inches | latest screening |
|-------|-----------|----------------------|-------|-------------|------------------|
| | cr01 | 350 June Street | 9.6 | 24 | 9/4/2008 |
| | cr02 | 18 Merriweather Road | 1.6 | 12 | 9/23/2008 |
| | cr03 | 19 Souther Drive | 1.3 | 12 | 9/25/2008 |
| | cr04 | 14 Bergin Lane | 34.5 | 24 | 9/23/2008 |
| | cr05 | 254 Mill Street | 22.5 | 30 | 9/4/2008 |
| | cr06 | 225 Mill Street | 3.0 | +- | 9/4/2008 |
| | cr07 | 225 Mill Street | 3.4 | 24 | 9/4/2008 |
| | cr08 | 173 Mill Street | 2.3 | 30 | 9/4/2008 |
| | cr09 | 173 Mill Street | 1.1 | 15 | 9/4/2008 |
| | cr10 | 80 Circut Avenue | 4.2 | 12 | 9/23/2008 |
| | cr11 | 159 Mill Street | 9.8 | 18 | 9/4/2008 |
| | cr12 | 141 Mill Street | 1.4 | 15 | 9/4/2008 |
| | cr13 | 268 June Street | 26.4 | 24 | 9/4/2008 |
| | cr14 | 21 Hemlock Street | 1.3 | 12 | 9/23/2008 |
| | crt01 | 2 Passway Four | 0.8 | 18 | 10/8/2008 |
| | crt02 | 93 Outlook Drive | 24.5 | 18 | 9/23/2008 |
| | crt03 | 93 Outlook Drive | 1.6 | 24 | 10/8/2008 |
| | crt04 | 93 Outlook Drive | 1.5 | 15 | 9/23/2008 |

V. <u>Inspection</u>

We began our inspections at 8:30am, the ground was dry the sun was out and the temperature was in the 70's. The last rain in the area was on the evening of 7/13 (passing thunder storms).

One item to note from the list above is that it looks like the numbering of the outfalls is off in a couple of instances. For example the list shows two outfalls at 225 Mill Street and one outfall at 254. We found only one outfall at 225 Mill Street and two at 254Mill Street. This was the same thing at 159 Mill Street (two located at this address) and 173 Mill Street (one at this address)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION I - EPA NEW ENGLAND

DATE: Draft:

Final: 8/29/11 (over 30 days due to several weeks of vacation after inspection)

Revised:

SUBJ: Recon of storm water outfalls around Coes Reservoir, Worcester MA.

FROM: Douglas Koopman, Environmental Engineer

Water Technical unit

THRU: Denny Dart, Water Technical Branch Chief

TO: File

I. Background Information

Date of inspection: 7/15/11

Weather Conditions: No rain for several days, Clear Sky and temp in high 70's

Personnel in

attendance: Doug Koopman EPA

Erin Trainor EPA Lab

II. Purpose of Inspection

Screen storm water outfalls in the area of Coes Reservoir. Inspectors were looking for storm water outfalls that had dry weather flow. Outfalls that had dry weather flow were sampled and tested for ammonia, chlorine and surfactants.

III. <u>Description of Outfalls</u>

Below is a list of storm water outfalls taken from the City of Worcester's Storm water Management Plan Annual Report.

| minor | Outfall # | Address | Acres | size inches | latest screening |
|-------|-----------|----------------------|-------|-------------|------------------|
| | cr01 | 350 June Street | 9.6 | 24 | 9/4/2008 |
| | cr02 | 18 Merriweather Road | 1.6 | 12 | 9/23/2008 |
| | cr03 | 19 Souther Drive | 1.3 | 12 | 9/25/2008 |
| | cr04 | 14 Bergin Lane | 34.5 | 24 | 9/23/2008 |
| | cr05 | 254 Mill Street | 22.5 | 30 | 9/4/2008 |
| | cr06 | 225 Mill Street | 3.0 | +- | 9/4/2008 |
| | cr07 | 225 Mill Street | 3.4 | 24 | 9/4/2008 |
| | cr08 | 173 Mill Street | 2.3 | 30 | 9/4/2008 |
| | cr09 | 173 Mill Street | 1.1 | 15 | 9/4/2008 |
| | cr10 | 80 Circut Avenue | 4.2 | 12 | 9/23/2008 |
| | cr11 | 159 Mill Street | 9.8 | 18 | 9/4/2008 |
| | cr12 | 141 Mill Street | 1.4 | 15 | 9/4/2008 |
| | cr13 | 268 June Street | 26.4 | 24 | 9/4/2008 |
| | cr14 | 21 Hemlock Street | 1.3 | 12 | 9/23/2008 |
| | crt01 | 2 Passway Four | 0.8 | 18 | 10/8/2008 |
| | crt02 | 93 Outlook Drive | 24.5 | 18 | 9/23/2008 |
| | crt03 | 93 Outlook Drive | 1.6 | 24 | 10/8/2008 |
| | crt04 | 93 Outlook Drive | 1.5 | 15 | 9/23/2008 |

V. <u>Inspection</u>

When the inspections began (approx 8:30am) the morning of 7/15/11 the ground was dry the sun was out and the temperature was in the 70's. The last rain was on the evening of 7/13 (passing thunder storms). Note 159 Mill Street had two outfalls at this location; 173 Mill Street only had one outfall. 225 Mill Street only found one outfall, 254 Mill Street had outfalls. It looks like the numbering of the outfalls got mixed up.

159 Mill Street

One outfall was flowing very slowly. The Inspector took picture and sample to run the field kit tests. The following results were obtained: NH^3 - .25ppm, CL^3 - .08 ppm, Surfactants - < .25ppm.

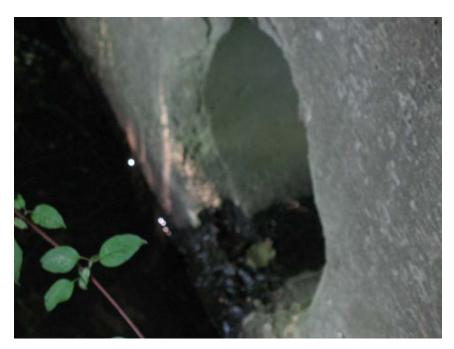


The second outfall located at 159 Mill Street. Water was up into the pipe so no sample was taken.



225 Mill Street

One outfall was located at this location. Outfall had a small amount of flow coming from the pipe. The inspectors could not collect a sample directly from the pipe so a sample of water was taken below the discharge in order to run the field kits. The following results were obtained: NH³- .0 ppm, CL⁻ - .14 ppm, Surfactants - <.25ppm.



93 Outlook Drive: The inspectors found 2 outfalls at this location. The list from the storm water report shows 3 outfalls at this location. One of the outfalls identified had water flowing from it and a sample was taken to run the field kit. The following results were obtained: NH³- 0 ppm, CL⁻ - .11 ppm, Surfactants - 0 ppm.



268 June Street: The inspectors were unable to get to the outfall pipe at this location as the residents of the property were not home. However, flow was noted in the storm water manhole in front of the property.

80 Circuit Avenue: This outfall pipe was found and the area around it is in need of being cleaned out as it is almost entirely blocked by sand and silt from the reservoir.

The remaining outfalls on the list were either not located or were located but had no dry weather flow during the inspection.